

ABSTRACT

(Fig. 2)

Drive unit for automatically actuating a vehicle door

The invention relates to a drive unit for automatically actuating a vehicle door, in particular the tailgate of a motor vehicle, it being possible to connect the drive unit (4) to the vehicle door (1) or to a transmission device (6) by means of an output shaft (5), said transmission device executing a pivoting movement which corresponds to the pivoting movement of the vehicle door (1), and the drive unit (4) comprising at least one first sensor device (7) which can be connected to an electronic evaluation device (21) and serves to detect the respective angular position of the vehicle door (1).

In order to make use of the advantages of an incrementally operating position measurement system of the vehicle door (1), in which, however, recalibration is necessary not only after the end positions of the vehicle door (1) are reached following a power cut, the invention proposes dividing the entire pivot angle (α) of the vehicle door (1) into at least three successive zones (pivot angle ranges) ($\alpha_1-\alpha_4$), it being possible to determine the individual pivot angle ranges ($\alpha_1-\alpha_4$) by means of a first sensor device (7) which is suitable for detecting absolute values. The pivot angle of the vehicle door within the individual zones ($\alpha_1-\alpha_4$) is then detected with the aid of a second sensor device (8) which comprises at least one incrementally operating measured value detector.